Year 8 Spring Term 2021 Maths Curriculum

Students in Year 7 study different content dependent upon their class. The classes will spend approximately two weeks studying each topic.

Mr McClusky, Mr Bees	
Measurements	After looking at how to read scales accurately, students look at the different metric units for length, mass and capacity. This involves estimating measuring and converting between different units.
Revision of Year 8 work	Students revisit and further practise work from throughout Year 8. The following topics will be covered: • Commutative and associative laws • Factors, multiples and primes • Multiplication and division • Fractions • Negative numbers • Decimals • Angles • Properties of shapes and solids • Area • Proportional reasoning • Fractions and percentages
End of Year tests and feedback	Students will sit two, 50 minute tests covering their work from throughout the year before analysing and evaluating their performance. These tests will take place in the week beginning 24th May.
Squares, cubes, roots and order of operations	By firstly drawing pictorial sequences, students define square cube and triangular numbers. Students also learn how to find and estimate square roots before looking at how these operations can be combined.
Averages and data	Students firstly look at the different averages used to represent sets of data. They then look at how data sets can be represented using both pie charts and line graphs.

Mr Ahluwalia, Mr Storey-Scott	
Transformations	Students transform shapes using reflections, rotations and translations. The reverse process of describing transformations is also considered as well as combining various transformations.
Revision of Year 8 work	Students revisit and further practise work from throughout Year 8. The following topics will be covered: • Commutative and associative laws • Factors, multiples and primes • Multiplication and division • Fractions • Negative numbers • Decimals • Algebraic expressions • Lines and angles • Fraction arithmetic • Solving equations • Arithmetic sequences
End of Year tests and feedback	Students will sit two, 50 minute tests covering their work from throughout the year before analysing and evaluating their performance. These tests will take place in the week beginning 24th May.
Representations of solids	After first looking at the different properties of common solids; students look at various ways of representing them including isometric drawings, nets and plan and elevations.
Averages	After looking at when it is appropriate to use each of the different averages, students solve problems involving missing data and data presentenced to them in a frequency table.

Mrs Joseph, Mr McClusky/Mr Hammond	
Maps, bearings and loci	Scales on maps are used to solve problems before students look at how to use and draw bearings. Construction techniques are then studied before being applied to solve loci problems.
Revision of Year 8 work	Students revisit and further practise work from throughout Year 8. The following topics will be covered: • Rounding and approximation • Formulae • Ratio and proportion • Percentage change • Straight line graphs • Maps, bearings and loci • Circumference and perimeter • Geometry and angles • Compound measures • Probability • Area
End of Year tests and feedback	Students will sit two, 50 minute tests covering their work from throughout the year before analysing and evaluating their performance. These tests will take place in the week beginning 24th May.
Pythagoras theorem	By firstly drawing pictorial sequences, students define square cube and triangular numbers. Students also learn how to find and estimate square roots before looking at how these operations can be combined.
Grouped and bivariant data	Students firstly look at the different averages used to represent sets of data. They then look at how data sets can be represented using both pie charts and line graphs.

After completing each topic students complete an assessed piece of work in their yellow assessment book.